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EXAMINER

PIZIALI, JEFFREY J

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/287,776

Applicant(s)

KANG ET AL.

Examiner

Jeff Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 9, 2002 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 1-3, 5-10, 12-17, and 19-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Ranganathan (US 5,764,201).

Regarding claim 1, Ranganathan discloses a video overlay apparatus comprising: a video scaler [Fig. 8A; 64] operatively responsive to input video data; and a programmable switching mechanism [Fig. 8A; 68], operatively coupled to the video scaler, to programmably switch video data from the video scaler into one of first and second video overlay generators [Fig. 8A; 32 & 42] that are each capable of being operably coupled to corresponding first and second display devices [Fig. 8B; 22 & 24], in order to enable the display of the video data from the video scaler and overlay data from one of the first and second overlay generators on one of a first output display device and a second display device (Column 8, Line 18 - Column 10, Line 7).

Regarding claims 2, 10 and 16, Ranganathan discloses the programmable switching mechanism includes a programmable register [Fig. 8A; 67] (Column 9, Lines 37-46).

Regarding claim 3, Ranganathan discloses a first display engine [Fig. 8A; 52] responsive to first graphics data for generating first video window timing data; a second display engine [Fig. 8A; 53] responsive to second graphics data for generating second video window timing data; a first video overlay generator [Fig. 8A; 32] operatively responsive to the first graphics data; and a second video overlay generator [Fig. 8A; 42] operatively responsive to the second graphics data (Column 9, Lines 5-36).

Regarding claims 5 and 19, Ranganathan discloses the programmable switching mechanism includes a selectable video clock source [Fig. 8B; VCLK] operatively coupled to the video scaler wherein the video scaler scales input video corresponding to a display engine for at least one of a plurality of video overlay generators in response to a video clock signal output from the selectable video clock source (Column 8, Line 18 - Column 10, Line 7).

Regarding claims 6, 12 and 20, Ranganathan discloses the programmable switching mechanism further facilitates programming of frame buffer space for each display engine based on which video overlay generator has been selected to receive input video (Column 12, Lines 4-12).

Regarding claims 7, 13 and 21, Ranganathan discloses the selectable video clock source includes a programmable switch to facilitate switching between a plurality of display dependent clock signals that are selectively coupled to a common video scaler line buffer (Column 4, Lines 7-16).

Regarding claims 8, 14 and 22, Ranganathan discloses a user interface operable to control the programmable switching mechanism to facilitate selective overlay display on a per application basis (Column 8, Lines 57-66).

Regarding claim 9, the limitations were previously addressed in the above rejection of claims 1, 3, 5 and 19.

Regarding claim 15, the limitations were previously addressed in the above rejection of claim 1.

Regarding claim 17, the limitations were previously addressed in the above rejection of claim 3, furthermore Ranganathan discloses generating a first video overlay [Fig. 10A & 10B; 22] based on the first graphics data and at least a portion of selectively routed input video data; and generating a second video overlay [Fig. 10A & 10B; 24] based on the second graphics data and at least a portion of selectively routed input video data (Column 10, Line 60 - Column 11, Line 15).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ranganathan (US 5,764,201) in view of Blahut et al. (US 5,570,126).

Regarding claims 4 and 11, Ranganathan does not expressly disclose operating a graphics data unpacker, a keyer, and a data packer in unison. However, Blahut does disclose a graphics data unpacker [Fig. 4; 418 & 420] operative to unpack graphics data received from a respective display engine [Fig. 4; 410]; a keyer [Fig. 4; 430 & 432] operatively coupled to the graphics data

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unpacker and responsive to selectively route video data from a programmable switching mechanism [Fig. 4; 440]; and a data packer [Fig. 4; 444] operatively coupled to the keyer to pack combined video and graphics data from the keyer (Column 6, Lines 11-49).

Ranganathan and Blahut are analogous art, because they are from the shared field of video overlay apparatuses. Therefore, it would have been obvious to one skilled in the art at the time of invention to use Blahut's data unpacker / keyer / data packer combination with Ranganathan's video overlay apparatus, so as to maintain overlay operations while processing compressed graphics data.

Regarding claim 18, the limitations were previously addressed in the above rejection of claims 4 and 11, furthermore Blahut discloses keying [Fig. 4; 430, 432, and 440] video and graphics data from a respective display engine [Fig. 4; 410] and the selectively routed video data selectively routed by a programmable switching mechanism [Fig. 4; 440]; and packing [Fig. 4; 444] combined video and graphics data for each respective video graphic overlay generator [Fig. 4; 414 and 416] for alternate output to the display (Column 6, Lines 21-49).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

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*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sinclair et al. (US 6,177,946) and Wang et al. (US 6,184,906) are cited to further evidence the state of the art pertaining to video overlay apparatuses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (703) 305-8382. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



J.P.

February 23, 2003



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